



Abstract

# Emerging Trends in the Eastern Cantabrian Small-Scale Fishery <sup>†</sup>

Eneko Bachiller \* , Maria Mateo <sup>‡</sup>, Estanis Mugerza, Arantza Murillas, Maria Korta and Lucía Zarauz

AZTI, Sustainable Fisheries Management, Basque Research and Technology Alliance (BRTA), Txatxarramendi Ugarte a z/g, 48395 Sukarrieta, Bizkaia (Basque Country), Spain; mmateo@azti.es (M.M.); emugerza@azti.es (E.M.); amurillas@azti.es (A.M.); mkorta@azti.es (M.K.); lzarauz@azti.es (L.Z.)

\* Correspondence: ebachiller@azti.es

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<sup>‡</sup> Presenting author (Oral communication).

**Abstract:** The general picture of most harbours in the Basque region (eastern Cantabrian coast) has changed during the last few decades, suggesting a decline in small-scale fisheries (SSF) activity which is carried out by vessels with LOA < 15 m. However, little is known in detail about this change, i.e., the recent development of the different fleet segments, or temporal changes regarding landed species. The present study shows that during the last decade (2010–2020) trolling lines targeting albacore in summer and especially handline fishery targeting mackerel in spring was the most important seasonal SSF in the region. Moreover, these fisheries intensified the fishing effort and showed the highest landings, especially for mackerel. In contrast, a decline in vessel numbers as well as fishing efforts and therefore landings was observed for netters, i.e., gillnets and trammel nets. The use of longlines and pots did not show any time trend. Regarding targeted species, the mean fish length landed by both long-liners and netters decreased with time, and so did their fish length-based niche breadth, indicating a lower length range in landed fish. In contrast, while fish diversity landed by hand-liners decreased, probably due to the mackerel fishing intensification, netters targeted a wider variety of small fish species. Technical optimization, probably related to specific market demands, suggests that Basque SSF fleet are shifting to specialized hookers, i.e., seasonal mackerel and albacore fishing, while netters, which are declining in number, are landing a wider range of target species. Given that knowledge on SSF has been trapped in a data-poor cycle, due to the lower importance in data collection when compared to other commercial fleets, understanding such developments might contribute to future management plans on a regional scale.

**Keywords:** SSF; fleet segmentation; landings; target fish species; fish length; fish diversity; fishing optimization; market demands



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